

# United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/613,967	07/03/2003	Geert Frank Bruynsteen	US000052A	6741
	7590 12/26/2006 LLECTUAL PROPERTY	& STANDARDS	EXAMINER	
P.O. BOX 3001	l	,	BELIVEAU, SCOTT E  ART UNIT PAPER NUMBER 2623	
BRIARCLIFF	MANOR, NY 10510			PAPER NUMBER
•	•		2623	
SHORTENED STATUTOR	Y PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE	
3 MO	NTHS	12/26/2006	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

	<u>,                                     </u>	Application No.	Applicant(s)	<del></del>		
		10/613,967	BRUYNSTEEN, GEERT FI	BRUYNSTEEN, GEERT FRANK		
	Office Action Summary	Examiner	Art Unit	<del></del>		
		Scott Beliveau	2623			
Period fo	The MAILING DATE of this communication app or Reply	pears on the cover sheet wi	th the correspondence address			
A SH WHIC - Exte after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DANSIONS of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. Depriod for reply is specified above, the maximum statutory period vire to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNION (36(a). In no event, however, may a revill apply and will expire SIX (6) MON, cause the application to become AB	CATION.  Poply be timely filed  THS from the mailing date of this communicatio  ANDONED (35 U.S.C. § 133).			
Status						
1)	Responsive to communication(s) filed on 22 No.	ovember 2006	•			
		action is non-final.				
3)	Since this application is in condition for allowar		ers, prosecution as to the merits is	s		
,_	closed in accordance with the practice under E	·		•		
Disposit	ion of Claims					
	Claim(s) 21-31 and 33-40 is/are pending in the	application				
	4a) Of the above claim(s) is/are withdraw					
	Claim(s) is/are allowed.	·				
· <u> </u>	Claim(s) <u>21-31 and 33-40</u> is/are rejected.	•				
7)	Claim(s) is/are objected to.					
8)□	Claim(s) are subject to restriction and/or	election requirement.				
Applicati	on Papers					
	The specification is objected to by the Examine					
·	The drawing(s) filed on is/are: a) ☐ acce		by the Evaminer			
. • / 🗀	Applicant may not request that any objection to the	· · · · · ·				
	Replacement drawing sheet(s) including the correcti		•	d)		
11)	The oath or declaration is objected to by the Ex		•	-,.		
	ınder 35 U.S.C. § 119					
_	Acknowledgment is made of a claim for foreign	priority under 35 LLC C. S	110(0) (d) 05 (5)			
-	☐ All b)☐ Some * c)☐ None of:	priority under 35 U.S.C. 9	119(a)-(d) of (f).			
۵/۱	<u> </u>	s have been received				
	<ol> <li>Certified copies of the priority documents have been received.</li> <li>Certified copies of the priority documents have been received in Application No</li> </ol>					
	3. Copies of the certified copies of the prior		<del></del>			
	application from the International Bureau		- Cook of Manager and Chago			
* S	See the attached detailed Office action for a list of	• • • • • • • • • • • • • • • • • • • •	eceived.			
Attachmen						
	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948)		ummary (PTO-413) /Mail Date			
3) 🔲 Inforr	nation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) r No(s)/Mail Date	_	formal Patent Application (PTO-152)	٠		

Art Unit: 2623

#### **DETAILED ACTION**

### Response to Arguments

1. Applicant's arguments filed on 22 November 2006 have been fully considered but they are not persuasive.

Applicant's argue that Nishio is not making a change to the decoding coefficient control signal [104] and is therefore not making a change to the software. The examiner respectfully disagrees. The relied upon rendering circuit [156] in the incorporated by reference US App No. 09/132,690 is software driven/controlled ('690: Page 14, Lines 13-21; Page 19, Lines 23-26). Nishio explicitly states that the decoding coefficient [104] is <u>varied</u> (and thereby 'changes') in accordance with the particular accounting level (Col 5, Lines 29-36). The particular decoding coefficient [104] serves as an instruction that controls and/or alters the particular decoding algorithm in the MPEG decoder [11] or 'rendering circuit' in order to generate/render a particular quality of content (Col 5, Lines 3-10). Given that the particular quality of the output is varying, a change to the software controlling a rendering circuit is being made in order to generate the desired quality of content.

## Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Art Unit: 2623

3. Claims 21-31 and 33-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Levin et al. (US Pat No. 6,654,546 B1) in view of Nishio et al. (US Pat No. 6,345,388 B1).

In consideration of claim 21, the Levin et al. reference discloses a "method of enabling an end-user to locally processes content information at a quality level remotely adjustable by a service provider". In particular the method comprises "communicating over a data network" (ex. telephone network) (Col 3, Lines 1-16) "with an end user apparatus for rendering content information" [101] associated with video programming (Col 2, Lines 17-41). The "end-user apparatus" [101] may subsequently be "configured . . . to locally adjust the quality of content information rendered through the end-user apparatus, the adjustment to quality being based on . . . a change in the storage capacity for storing content information in a storage device associated with the end-user apparatus" (Col 3, Line 56 – Col 4, Line 8). For example, a recording device may be shipped that is only allowed to record and subsequently render the correspondingly stored low quality of video. Therefore, the system when shipped would initially be unable to store/render high quality video. The particular service provider upgrade would subsequently enable the system to adjust the quality of stored/rendered video in connection with the capability to store a higher quality video than was originally possible.

The Levin et al. reference explicitly incorporates by reference US App No. 09/132,690 with respect to details pertaining the "apparatus" [101] (Col 1, Lines 6-18). As illustrated in Figure 2, the "storage device" further comprises "software controlling a rendering circuit" [156] "associated with the end user apparatus" (Page 11, Line 24 – Page 12, Line 5; Page 13, Lines 15-28). The Levin et reference, however, is silent with respect to a "change to the software controlling a rendering circuit".

Art Unit: 2623

In an analogous art pertaining to consumer electronic devices which provide a service relating to the processing of the content information local at the end-user's equipment, the Nishio et al. reference discloses a television receiving apparatus [1] wherein an "adjustment to quality [is] based on . . . a change to the software controlling a rendering circuit associated with the end user apparatus" (Col 4, Line 64 – Col 5, Line 43). Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Levin et al. with the teachings of Nishio et al. so that the "adjustment to quality [is] based on (1) a change in the storage capacity for storing content information in a storage device associated with the end-user apparatus, and (2) a change to the software controlling a rendering circuit associated with the end user apparatus" for the purpose of providing a means to store/render a video image at a particular quality level based upon based upon a subscriber requested accounting level (Nishio et al.: Col 1, Lines 42-47).

Claim 22 is rejected wherein the "end-user receives a higher quality in return for a higher fee" (Levin et al.: Col 3, Lines 16-25; Col 3, Line 56 – Col 4, Line 8).

Claim 23 is rejected in light of the combined teachings wherein both references teach that the "content information comprises video data" (Levin et al.: Col 2, Lines 17-28; Nishio et al.: Abstract). Levin et al. suggest the particular usage of levels of quality and Nishio et al. reference teaches that "quality level relates to at least one of a color depth and a resolution of the video data when rendered" (Col 5, Lines 29-42).

Claim 24 is rejected as aforementioned wherein "adjusting the quality of the storing comprises regulating a storage capacity of the storage device" (Levin et al.: Col 3, Line 56 – Col 4, Line 8).

Art Unit: 2623

Claim 25 is rejected wherein the "regulating of the storage capacity comprises providing end-user access to a selected portion of a local storage" (Levin et al.: Col 3, Lines 26-38).

Claim 26 is rejected wherein the "local storage" [112] comprises a "HDD" and the "storage capacity is regulated by controlling a mechanical component of the HDD" associated with the physical circuitry of the drive (Levin et al.: Col 2, Lines 63-65). For example, limiting the particular ability for the drive to access all sectors associated with its full storage capacity effectively controls the mechanical components of the HDD so as to not read/write to those sectors.

In consideration of claim 27, Levin et al. discloses that the "storage capacity is regulated by controlling an address range of the memory" (Col 2, Lines 55-63). The reference does not explicitly teach that the "local storage comprises a solid state memory", however, the reference teaches that the invention may be implemented using other forms of mass storage (Col 2, Lines 38-41). Applicant's admission of fact provides evidence as to the existence of "solid state memory" as a form of mass storage (ex. FLASH memory). Accordingly, it would have been obvious to one having ordinary skill in the art at time the invention was made so as to modify Levin et al. such that the "local storage comprises a solid state memory" for the purpose of using a utilizing a form of storage which is small, rugged, and consumes less power than corresponding magnetic drives.

In consideration of claim 28, as aforementioned, the Levin et al. discloses that the "storage capacity is regulated by controlling a mechanical component" of the local storage device [112] (Levin et al.: Col 3, Lines 26-38). The reference, however, does not explicitly disclose that the "local storage comprises a ODD", however, the reference teaches that the

Art Unit: 2623

invention may be implemented using other forms of mass storage (Col 2, Lines 38-41). Applicant's admission of fact provides evidence as to the existence of "ODD" as a form of mass storage. Accordingly, it would have been obvious to one having ordinary skill in the art at time the invention was made so as to modify Levin et al. such that the "local storage comprises a ODD" for the purpose of using a utilizing a form of storage that is robust in that the stored data cannot be corrupted in the presence of magnetic fields.

Claim 29 is rejected wherein the "locally adjusting the quality comprises changing the software for the rendering circuit to control a data format of the content information for playout" (Nishio et al.: Col 4, Line 51 – Col 5, Line 42).

Claim 30 is rejected in light of the combined teachings as aforementioned. The reference discloses a "CE apparatus" [101] for "processing content information received via a data network" (Col 2, Lines 28-41). The "apparatus" [101] enables "an end-user to select a specific one of multiple quality levels of the processing" and a "controller" [114] "coupled to a storage device" [112]" for "setting the specific quality level in response to a signal supplied by a third party . . . wherein a specific quality level corresponds to a specific storage capacity allocated for the content information by the controller according to the signal" (Col 3, Line 56 – Col 4, Line 8). The "apparatus" [101] is "configured to receive the content information and the signal via a data network" (Col 2, Lines 28-41; Col 3, Lines 1-16) and the "controller" [114] "sets . . . the specific quality . . . based on (1) a change in the storage capacity for storing content information" (Col 3, Line 56 – Col 4, Line 8). For example, a recording device may be shipped that is only allowed to record and subsequently render the correspondingly stored low quality of video. Therefore, the system when shipped would

Art Unit: 2623

initially be unable to store/render high quality video. The particular service provider upgrade would subsequently enable the system to adjust the quality of stored/rendered video in connection with the capability to store a higher quality video than was originally possible.

The Levin et al. further explicitly incorporates by reference US App No. 09/132,690 with respect to details pertaining the "apparatus" [101] (Col 1, Lines 6-18). As illustrated in Figure 2, the "apparatus enables processing comprising playing out the content information" and further comprises a "circuit for rendering the content information" [156] as well as software controlling a rendering circuit" [156] (Page 11, Line 24 – Page 12, Line 5; Page 13, Lines 15-28). The aforementioned "controller" [114] of Levin et al. is "coupled to the data rendering circuit" [156]. Levin et al., however, is silent with respect to the "controller . . . setting the specific quality of the rendering under control of the signal" as well as a "change to the software controlling a rendering circuit".

In an analogous art pertaining to video distribution equipment, the Nishio et al. reference discloses a television receiving apparatus [1] wherein the "controller" [12] is "coupled to the data rendering circuit" [11] "for setting the specific quality of the rendering under control of the signal" (Col 4, Line 64 – Col 5, Line 43). The "setting of the specific quality is based on ... a change to the software controlling a rendering circuit associated with the end user apparatus" (Col 4, Line 64 – Col 5, Line 43). Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Levin et al. with the teachings of Nishio et al. so that the "controller is coupled to the rendering circuit for setting the specific quality of the rendering under control of the signal, wherein the setting of the specific quality is based on (1) a change in the storage capacity for storing content

Art Unit: 2623

information, and (2) a change to the software controlling a rendering circuit associated with the end user apparatus" for the purpose of providing a means to store/render a video image at a particular quality level based upon based upon a subscriber requested accounting level (Nishio et al.: Col 1, Lines 42-47).

Claim 31 is rejected wherein the "storage device" [101] "comprises at least one of: a HDD" (Col 2, Lines 28-28).

Claim 33 is rejected as aforementioned wherein the Levin et al. reference discloses that the "content information comprises video data" (Col 2, Lines 17-28). While the reference discloses the particular usage of levels of quality associated with video content, the reference does not particularly disclose that the "quality level relates to at least one of a color depth and a resolution of the video data when rendered". In an analogous art pertaining to video distribution equipment, the Nishio et al. reference discloses a television receiving apparatus [1] that is operable to locally adjust the quality of rendered video wherein the "specific quality determines at least one of a color depth and a resolution of the rendered content information" (Col 5, Lines 29-42). Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made so as to modify Levin et al. with the teachings of Nishio et al. for the purpose of providing a means to store/render a video image at a specific quality based upon based upon a subscriber requested accounting level (Nishio et al.: Col 1, Lines 42-47).

Claim 34 is rejected in view of the combined references. As illustrated in Figure 1, the reference discloses an "end-user system". The "system" comprises an "output" [105] for "rendering of content information to an end user" such as that associated with video

Art Unit: 2623

programming. A "communication interface" [115] for "communicating over a data network with a third party server for remotely adjusting the rendering of content information on the end-user system" wherein the "quality of content information rendered through the output [is] adjustable by the server [and] the adjustment to quality [is] based on . . . a change in the storage capacity for storing content information in a storage device" [112] "associated with the end user apparatus" (Col 3, Line 1 – Col 4, Line 8).

The Levin et al. explicitly incorporates by reference US App No. 09/132,690 with respect to details pertaining the recording device [101] (Col 1, Lines 6-18). As illustrated in Figure 2, the "storage device" further comprises a "software controlling a rendering circuit" [156] "associated with the end user system" (Page 11, Line 24 – Page 12, Line 5; Page 13, Lines 15-28). The Levin et reference, however, is silent with respect to a "change to the software controlling a rendering circuit".

In an analogous art pertaining to consumer electronic devices which provide a service relating to the processing of the content information local at the end-user's equipment, the Nishio et al. reference discloses a television receiving apparatus [1] wherein an "adjustment to quality [is] based on . . . a change to the software controlling a rendering circuit associated with the end user apparatus" (Col 4, Line 64 – Col 5, Line 43). Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Levin et al. with the teachings of Nishio et al. so that the "adjustment to quality [is] based on (1) a change in the storage capacity for storing content information in a storage device associated with the end-user apparatus, and (2) a change to the software controlling a rendering circuit associated with the end user system" for the purpose of providing a means

Art Unit: 2623

to store/render a video image at a particular quality level based upon based upon a subscriber requested accounting level (Nishio et al.: Col 1, Lines 42-47).

Claim 35 is rejected wherein the "storage capacity of the storage device is remotely adjustable" (Levin et al.: Col 2, Line 66 – Col 3, Line 38).

Claim 36 is rejected in light of the combined teachings such that the "software is remotely adjustable" in accordance with providing field upgrades to the recording/playback unit so as to provide particular quality levels of output (Levin et al.: Figure 1; Col 3, Line 56 – Col 4, Line 8).

Claim 37 is rejected wherein the "storage device" [101] "comprises at least one of: a HDD" (Levin et al.: Col 2, Lines 28-28).

Claim 38 is rejected wherein the "quality of content information comprising video information is remotely adjustable and the output apparatus comprises a video display" (Levin et al.: Figure 1; Col 2, Lines 23-27; Col 3, Line 56 – Col 4, Line 8).

Claim 39 is rejected wherein the "output comprises a television display" [105] (Levin et al.: Figure 1).

Claim 40 is rejected wherein the "storage device comprises a PVR" (Levin et al.: Col 1, Lines 49-53).

#### Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 2623

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Beliveau whose telephone number is 571-272-7343. The examiner can normally be reached on Monday-Friday from 8:30 a.m. - 6:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W. Miller can be reached on 571-272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or

Art Unit: 2623

access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Scott Beliveau Primary Examiner Art Unit 2623

**SEB** 

December 20, 2006